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(54) Title: **UNITIZED HYBRID ROCKET SYSTEM**

(57) Abstract: The hybrid rocket system of this invention is characterized by use of an oxidizer tank having a cylindrical midsection surrounded by a skirt and bonded thereto by a layer of elastomeric adhesive. The skirt outer surface is in turn adhesively secured to a spacecraft inner surface. An elongated solid-fuel motor case is mechanically rigidly secured to a central rear surface of the tank, and the case terminates in a throat and nozzle. The elastomeric-adhesive bonding of tank to skirt, and rigid adhesion of skirt to spacecraft forms the sole support for the rocket system, and separate support for the motor case is not required.



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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : F02K 9/72 US CL : 60/251,796,797; 244/172 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 60/251,796,797; 244/172 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,893,266 A (SMITH et al) 13 April 1999 (13.04.1999), See entire document.	1-7
A	US 3,354,647 A (AYCOCK) 28 November 1967 (28.11.1967), See entire document.	1-7
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer <i>Sharon A. Greene for</i> Ehud Gartenberg Telephone No. 703/308-0861